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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/554,250	07/05/2006	Ferdinand Mannle	061778.002	2992
7590 James E Bradley Bracewell & Giuliani PO Box 61389 Houston, TX 77208-1389			EXAMINER MULCAHY, PETER D	
			ART UNIT 1762	PAPER NUMBER
			MAIL DATE 10/14/2011	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary****Application No.**

10/554,250

**Applicant(s)**

MANNLE ET AL.

**Examiner**

Peter D. Mulcahy

**Art Unit**

1762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 July 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on \_\_\_\_; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 5) ☒ Claim(s) 1-25 is/are pending in the application.
- 5a) Of the above claim(s) 12-25 is/are withdrawn from consideration.
- 6) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 7) ☒ Claim(s) 1-11 is/are rejected.
- 8) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 9) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE-08)  
Paper No(s)/Mail Date \_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1 and 4-11 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for aqueous hydrogen peroxide solution and/or organic peroxides, does not reasonably provide enablement for the scope of "oxidizing agent" or air as the claimed oxidizing agent. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make or use the invention commensurate in scope with these claims. This is a restatement of the rejection set forth in the paper mailed 1/31/11. Applicant's arguments filed 7/29/11 have been fully considered but have been found not persuasive. Specifically, applicant states that the preferred oxidizing agents are stated in the specification and concludes that one of ordinary skill will know that these will function as desired. First and foremost, the scope of "oxidizing agent" is not supported and clearly fails the test *In re Wands*, 858 F.2d 731, 737, 8 USPQ2d 1400, 1404 (Fed. Cir. 1998). Applicant fails to respond to this portion of the rejection. Further, air and oxygen enriched air are not exemplified in the specification or described past mere mention. It is acknowledged that the specification need not exemplify all embodiments so as to be considered enabling for the embodiments. The breadth of these claims and species are not enabled. The divergent chemical structure and properties of air and the

peroxide species is such that one of ordinary skill would not expect these to be functional equivalents. Applicant has failed to show or allege that these are functional equivalents. Further, applicant alleges that "no oxidizing agent is disclosed" in the Yoshizawa reference. There is no nitrogen purge and air is present in the reaction of Yoshizawa. As such, it is unclear as to the function of air as an oxidizing agent.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3-6, 8 and 11 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Boberg US 3,865,767 or Chapman et al. US 5,352,716.

6. Claims 1, 4-6, 8 and 11 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Hwu et al. US 5,434,277 or Yoshizawa et al. US 5,175,322.

7. The art rejections set forth under 35 USC 102/103 in the paper mailed 1/31/11 are deemed proper and are herein repeated.
8. The amendment filed 7/29/11 has been fully considered. Applicant has limited the species of metals and incorporated the limitation of claim 26 into claim 1.
9. Each of the cited patents shows the claimed species of metals. The limitation of claim 26 reads "wherein the reaction produces at least 1 volatile reaction product." This is not seen to significantly limit the claim and is anticipated by the cited art. Specifically, "volatile" is a relative term and depends on conditions. To limit a reaction product by its tendency to vaporize without reciting the conditions does not significantly limit the claim. The specification fails to discuss conditions under which the reaction product is volatile. As such, the reaction products described in the prior art are considered "volatile" within the scope of the claim. Applicant has failed to show or allege that the art does not produce reaction products that are within the scope of the claim. The fact that the art does not specifically describe "volatile" reaction products is not germane. The art need not describe the properties in the terms used by applicant so as to anticipate the claimed properties.

#### ***Response to Arguments***

10. Applicant's arguments filed 7/29/11 have been fully considered but they are not persuasive.
11. Applicant argues that Boberg is silent as to the method of preparing an additive for the controllable degradation of thermoplastics. This is not persuasive. The "degradation compound" as an additive for thermoplastics discussed in Boberg reads

on the claimed additive. The claim language following "for" in the claims is not limiting. This is intended utility and mental steps which do not limit the scope of the method as claimed.

12. It is then alleged that Boberg does not teach the method of method of preparing the ferric hydroxy stearate and fails to describe the formation of this compound in the presence of the claimed oxidizing agent. This is not persuasive. The reaction of the metal salt (X-Fe) is reacted with the fatty acid (ROOH) is described at column 5 of this patent. Air is presumed to be present given the reaction taking place under atmospheric conditions. There is no nitrogen purge discussed and reaction conditions are not described as being oxygen free. As such, it is reasonable to presume that air and oxygen are present. Further, the propagation reaction reads on the claimed reaction and the peroxides are clearly present during the propagation reaction.

13. Applicant argues that Chapman does not teach or suggest the method of reacting a metal salt with a fatty acid in the presence of an oxidizing agent. This is not persuasive. The metal salt is reacted with the fatty acid resulting in the degradation of the thermoplastic, column 5 lines 58+. This is seen to anticipate and/or render obvious as claimed.

14. Applicant argues that Hwu does not teach the presence of the oxidizing agent. This is not persuasive. Again, there is no exclusion of air or oxygen in the reaction of Hwu. The hydroxides and oxides read on the oxidizing agents as claimed.

15. Applicant argues that Yoshizawa discloses the reaction of an alkali metal soap of a fatty acid with an inorganic metal salt to create a metal soap. The alkali metal soap as

recited reads on the claimed "fatty acid derivative". The presence of the oxidizing agent is anticipated by the hydroxides and the air present at the interface of the reaction solution and the free space in the reaction vessel. Note, there is no purging step. Further, the rotating impellers would create agitation at the surface and bring air into the reaction solution as well. This is seen to be an anticipatory example. Applicant's unsupported allegation to the contrary can not be found persuasive.

### ***Conclusion***

16. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter D. Mulcahy whose telephone number is (571)272-1107. The examiner can normally be reached on Mon.-Fri. 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on 571-272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Peter D. Mulcahy/  
Primary Examiner, Art Unit 1762